The Farmer's Warfare Against Weeds.

The last number of Wallace's Farmer contains a long editorial on this subject. It is the one common ground on which farmers from all parts of the world can meet. Everywhere they have this enemy to contend with. In this state we do not have Canada thistles, but we have maiden cane (Panicum Curtissi), which is perhaps about as hard to conquer. Yet we know that it can be destroyed by persistently cutting off the tops once every ten days or two weeks. It need not be dug up at all, if the tops are not allowed to grow, one season will make an end of it if the work is faithfully done.

"Thorns and thistles also shall it bring forth to thee" was written ages ago, when the first farmer first began his farming operations. The warfare against thorns and thistles, using this as a general term to indicate every kind of weeds, has continued with greater or less success, generally less, ever since. The farmer assumes that the land was cursed with these pests; that there is an inexhaustible supply of the seeds in the soil; and therefore all that he has in general attempted to do has been to reduce them to the minimum for the present year and the present crop.

Weeds have their uses, the main one of which is to put the farmer on his mettle: to make him think, plan, and work to accomplish success; and thus develop in him a higher type of man. The statement "in the sweat of thy face shalt thou eat bread" is not a curse, but really a blessing. The nations of farmers that have not been obliged to work to secure results are invariably a poor class of farmers and a poor type of men.

In the prairie sections of the west, where the weed curse was at its minimum when the country was first developed, it has been increasing from year to year. In addition to the weeds native to the soil we have introduced by carelessness and neglect all sorts of foreign weeds. They traveled some from east to west, others from west to east, still others from north to south, and vice versa! and most of them seem equally at home in the rich corn lands of the Mississippi valley. Farther north outside of the corn belt the weeds are a greater curse than in the corn belt proper, because some of the very worst weeds seem peculiarly adapted to that section, and because farmers not having a rotation including a cultivated crop allow weeds such as Canada thistles, quack grass, and French grass to increase and multiply until life becomes a burden.

Farmers seem to assume that there is an inexhaustible supply of weed seeds in every fertile soil, and that therefore the most that can be done is simply to minimize the mischief for the present. The farmer aims to keep the weeds out of his corn up to the first of July. He allows ragweed to grow rank in his pastures, forgetting that mowing it in time would at least prevent the more abundant sowing of seed.

It is our purpose to devote considerable time and space and to use abundant illustrations during the next three months in order if possible to stimulate the farmer to greater exertion in his warfare against weeds, and by pointing out the peculiar habits and nature of different weeds show how their extermination may be carried on with the maximum of success.

There are three classes of weeds which the farmer will do well to consider—the annuals, the biennials, and the perennials. Annual weeds, like ragweed, cocklebur, velvet weed, and the miscellaneous assortment that may be found growing in every corn field, grow each year, produce seed, and die. Hence if they are not permitted to go to seed the supply of weed seeds, of which every soil contains a large abundance, will gradually be diminished. These weeds are the easiest to kill, provided the farmer goes at it intelligently. In the corn and potato fields this can be done by attacking them at their weakest point, when they have the first and second leaves, which the farmer can do in any kind of good weather with the harrow, weeder, and cultivator.

They cannot be thus attacked in the pasture, for obvious reasons, but as every farmer knows, land that is kept rich and well seeded with grasses produces but a small crop of weeds; for the simple reason that the weeds have no chance to grow, or, if they grow, are smothered out by the thick stand of grasses.

Biennial weeds are those which grow one year and produce seed the next, such, for example, as burdock and many varieties of thistles. If these are attacked with the mower when they appear in the pasture, before they produce seed, the supply in the soil can be very greatly diminished. With reference, however, to thistles, there must be co-operation among the farmers over a large section of country and also in keeping the roadsides clean; for the reason that no matter how clean a farmer keeps his land from thistles the wind will blow the seed in from the roadsides or from the fields of his slovenly neighbors.

The most difficult problem in weed destruction is presented by the perennials, such as quack grass, Canada thistles, horse nettle, and weeds of that class. Some of these form underground root stalks, or rhizomes, to use the language of the botanist, which grow from year to year. The only way in which these weeds can be controlled is by strangulation, that is, by not permitting the green leaves to obtain carbon dioxide, commonly called carbonic acid, from the atmosphere and thus store up starch in the roots.

There are various ways of strangulation. In a small patch of Canada thistles, for example, it is not a difficult matter to hoe them off once a week. Where there are larger areas, and the same applies to quack grass, one must necessarily take a year, and keep the ground stirred and harrowed frequently during the season, and finish up the work by digging out the remainder with the spade.

Difficult as may be the problem, if our lands are to continue to be really worth their present prices, it must be attacked with greater earnestness than it has been in the past. We can point out hundreds of farms whose actual value has been reduced at least ten dollars an acre during the last three or four wet seasons, when the weeds have had unusual chances to grow. If we were to buy land that is infested with cockleburs, for example, as thousands of farms are, we would ask a discount of not less than fifteen dollars per acre, and on some lands twenty or twenty-five.

How to deal with these weeds will be discussed in detail in a series of articles during the season. The object of the present article is simply to impress upon farmers the necessity for greater vigilance and a higher intelligence in attacking the enemy, the weeds, which, after all, are the greatest enemy of the farmer.

The Florida Pinery of Geo. C. Matthams.

The newspapers of the Florida East Coast are certainly enterprising and ingenious, when it comes to advertising their section of the State. The following is from the Palm Beach News:

There are thousands of acres of land along the East Coast of Florida from a little north of Rockledge nearly to Cape Sable well suited to mango culture. Much of this land is known as spruce pine and scrub, and could be better devoted to mango culture than to any other purpose. We know that mangoes will grow as far north as Rockledge. The fruit was marketed from a point near there repeatedly in 1904. The trees were killed down to the ground in January, 1905. They are up and blooming again this year. Mangoes were grown and sent from the vicinity of Quay to Lake Worth about twenty-five years ago. Mango trees at Mangonia full two feet in diameter above the swell of the roots were badly killed back in 1905, but are fast outgrowing all signs of injury, and some of these, as well as the avocados, are fruiting this year.

There is really no question whether the mango and avocado will make themselves at home along this East Coast. It is settled past reasonable dispute that we who have an interest in this East Coast can have an abundance of mangoes if we will only plant the seed.

We shall have now and then an off year, just as with all other fruits and farm crops over the world. No real farmer or fruit grower ever thought of giving up his wheat or corn or apple or peach crop because of an occasional failure.

But we may, if we will, have choice mangoes. The choice varieties can be protected, so that the variety need not be lost wherever the roots will live under ground. I do not ask you to take my word for this, but come to Mangonia and see how this can be surely done. ELBRIDGE GALE.

Mangonia, June 8th, 1906.

Florida Pinery—Big Head.

Even before West Palm Beach became a name the Florida Pinery had both a habitation and a name and was managed by Geo. C. Matthams, its present owner and manager.

The pinery proper consists of 32 acres of bearing pines, nearly all of which are of the Red Spanish variety, though there are also some Porto Ricos, Smooth Cayennes, Ripley Queens, Red and Green Ceylons and Giant Kews, these last three mentioned kinds having come directly from the island of Ceylon to Mr. Matthams, who thus has the honor of being the first to introduce them here.

The plantation has yielded this year a full crop of good pines—the best and finest in every way since 1897, the shipments having averaged a carload (of 300 crates) a day since May 27, and occasionally two carloads, nearly all being shipped through the Lake Worth & Indian River Pineapple Growers' Association, of which Mr. Matthams is an officer and a charter member. Some 700 crates have been shipped direct to England and brought good returns, but, owing to the rains and quicker ripening of the pines no more are being sent across the water.

To show the size of the pines shipped the books were examined and it was found that over half of the crates were 24s—six-sevenths of the crates being 24s and 30s, the two most de-

A Hair Dressing

Nearly every one likes a fine hair dressing. Something to make the hair more manageable; to keep it from being too rough, or from splitting at the ends. Something, too, that will feed the hair at the same time, a regular hair-food. Well-fed hair will be strong, and will remain where it belongs—on the head, not on the comb!

The best kind of a testimonial—"Sold for over sixty years."

Made by J. C. Ayer Co., Lowell, Mass. Also manufacturers of
Ayer's SARSAPARILLA. PILLS. CHERRY PECTORAL.

GOOD HOUSEKEEPING

A Handsome, Illustrated Monthly Magazine. For All the Family

GOOD HOUSEKEEPING is bright, helpful, practical, and full of good cheer. Each month it brings the whole family together in the enjoyment of everything that is good. Good stories and good pictures to amuse the grown-ups and their children, good articles about the serious and the lighter problems of the home, the bringing up of children, education, higher thought, music, art, etc. Artistically, it is one of the choicest magazines. The illustrations delight the soul of the lover of art. Beautiful color cover designs are a special feature.

Reaches 200,000 Homes
Over a Million Readers

$1.00 a Year 15 Cents a Copy

The PHELPS PUBLISHING COMPANY
New York SPRINGFIELD, MASS. Chicago